REMARKS

Applicant hereby traverses the outstanding rejections, and requests reconsideration and withdrawal in light of the remarks contained herein. New claims 21-25 are presented for consideration. Claims 1-25 are pending in this application.

Rejection under 35 U.S.C. §103(a)

Claims 1, 4-5, 7-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hong ('964) in view of Nally et al. ('525, hereinafter Nally).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. See M.P.E.P. § 2143. Without conceding the second criteria, Applicant asserts that the rejection does not satisfy the first and third criteria.

Improper Motivation

The Office Action admits that Hong does not teach having a selectively configurable interconnection matrix. The Office Action attempts to cure this deficiency by introducing Nally, which the Office Action alleges to teach having such elements. The motivation for making the combination was presented as follows:

"it would have obvious ... to modify the graphics pipelines as taught by Hong with the 'plurality of stages with the ability to use selected outputs of one or more stages of said pipelines to selected inputs of one or more stages of said pipelines' as taught by Nally because it provides for an efficient processing of graphics object data..."

It is well settled that the fact that references can be combined or modified is not sufficient to establish a prima facie case of obviousness, M.P.E.P. § 2143.01. Hong already discloses an efficient device and method for processing graphics data, see the title and the text of the specification beginning on column 4, line 11. Thus, the teaching of Nally is not needed for the efficient operation of Hong. Consequently, the language of the provided motivation is merely a statement that the reference can be modified, and does not state any

25383207.1 7

desirability for making the modification. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ.2d 1430 (Fed. Cir. 1990), as cited in M.P.E.P. § 2143.01. Thus, the motivation provided by the Examiner is improper, as the motivation must establish the desirability for making the modification.

Furthermore, Hong appears to teach away from such a modification. A prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention, M.P.E.P. § 2141.02. In the instant case, Hong states switching circuitry like multiplexers and other types of controllers are not needed for the arrangement of Hong, see column 3, lines 28-30. The teaching of Nally that the Examiner desires to combine with Hong is associated with attribute controller 233 of Nally. It is improper to combine references where the references teach away from their combination, M.P.E.P. § 2145. Therefore, Applicants respectfully assert that it is improper to combine the teaching of Nally with the arrangement of Hong in order to meet the present claims.

No valid suggestion has been made as to why a combination of Hong and Nally is desirable. Therefore, the rejection of claims 1, 4-5, and 7-20 should be withdrawn.

Not All Limitations

The Office Action admits that Hong does not teach having a selectively configurable interconnection matrix. The Office Action attempts to cure this deficiency by introducing Nally, which the Office Action alleges to teach having such elements. However, this combination, as presented, does not teach or suggest all limitations of the claimed invention.

Claim 1 defines an image processor comprising a selectively configurable interconnection matrix defining an image path for providing selected outputs from one or more of said stages of one of said pipelines to selected inputs of one or more of said stages of the other of said pipelines. The Office Action admits that Hong does not disclose at least these limitations. The Office Action asserts that attribute controller 233 of Nally teaches these limitations. The attribute controller 233 is a member of pipeline 205. It receives an input from serializer 236 and provides an output to both CLUT 234 and overlay control 230. The attribute controller is not selectively configurable, its inputs and outputs are fixed to the serializer, CLUT, and overlay control. Thus, the combination of Hong and Nally does not

25383207.1

teach all of the claimed limitations. Therefore, the Applicant respectfully asserts that for the above reasons claim 1 is patentable over the 35 U.S.C. § 103(a) rejection of record.

Claim 10 defines a method of processing an image comprising selectively configuring a pipeline interconnection matrix to establish an image path through one or more stages of a graphics pipeline and one or more stages of a bit map image pipeline. The Office Action relies upon the rejection of claim 1 for the rationale in rejecting claim 10. Thus, the Applicant believes that Office Action is not relying on Hong to disclose the claimed pipeline interconnection matrix. The Applicant assumes that attribute controller of Nally is being relied upon to teach this method element. The attribute controller 233 is a member of pipeline 205. It receives an input from serializer 236 and provides an output to both CLUT 234 and overlay control 230. The attribute controller cannot be selectively configured, as its inputs and outputs are fixed to the serializer, CLUT, and overlay control. Thus, the combination of Hong and Nally does not teach all of the claimed limitations. Therefore, the Applicant respectfully asserts that for the above reasons claim 10 is patentable over the 35 U.S.C. § 103(a) rejection of record.

Claim 19 defines an image processor comprising a switch for selectively connecting an output from any one of said processors to an input of any other one of said processors. The Office Action relies upon the rejection of claim 4 for the rationale in rejecting claim 10. Applicant requests clarification as to this statement, Applicant believes that the Examiner meant to rely on claim 1. Thus, the Applicant believes that Office Action is not relying on Hong to disclose the claimed switch. The Applicant assumes that attribute controller of Nally is being relied upon to teach this switch. The attribute controller 233 is a member of pipeline 205. It receives an input from serializer 236 and provides an output to both CLUT 234 and overlay control 230. The attribute controller cannot switch the outputs or inputs, as its inputs and outputs are fixed to the serializer, CLUT, and overlay control. Thus, the combination of Hong and Nally does not teach all of the claimed limitations. Therefore, the Applicant respectfully asserts that for the above reasons claim 19 is patentable over the 35 U.S.C. § 103(a) rejection of record.

Claims 4-5, 7-9, 11-18, and 20 depend directly from base claims 1, 10, and 19, respectively, and thus inherit all limitations of their respective base claims. Each of claims

25383207.1

4-5, 7-9, 11-18, and 20 sets forth features and limitations not recited by the combination of Hong and Nally. Thus, the Applicant respectfully asserts that for the above reasons claims 4-5, 7-9, 11-18, and 20 are patentable over the 35 U.S.C. § 103(a) rejection of record.

Rejection under 35 U.S.C. §103(a)

Claims 2-3 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hong in view of Nally, and further in view of Sturgess ('893).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. See M.P.E.P. § 2143. Without conceding the second criteria, Applicant asserts that the rejection does not satisfy the first and third criteria.

Improper Motivation

As stated above, the motivation for making the Hong/Nally combination is flawed. The motivational statements provided to add Sturgess to this combination do not overcome the deficiencies of the motivation for making the Hong/Nally combination.

Thus, no valid suggestion has been made as to why a combination of Hong, Nally, and Sturgess is desirable. Therefore, the rejection of claims 2-3 and 6 should be withdrawn.

Not All Limitations

Base claim 1 is defined as described above. The combination of Hong and Nally does not disclose these limitations, as discussed above. Sturgess is not relied upon in the Office Action as disclosing these limitations. Therefore, the combination of references set forth in this rejection does not teach all elements of the claimed invention.

Claims 2-3 and 6 depend directly from base claim 1, and thus inherit all limitations of claim 1. Each of claims 2-3 and 6 sets forth features and limitations not recited by the combination of Hong, Nally, and Sturgess. Thus, the Applicant respectfully asserts that for

25383207.1 10

the above reasons claims 2-3 and 6 are patentable over the 35 U.S.C. § 103(a) rejection of record.

Conclusion

New claims 21-25 have been provided for the consideration of the Examiner. New claims 21-25 set forth features and limitations not recited by the prior art of record. Thus, the Applicants respectfully assert that for the above reasons new claims 21-25 are patentable over the rejections of record.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 10004829-1, from which the undersigned is authorized to draw.

Dated: March 10, 2004

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No.EV255076052US, in an envelope addressed to: Commissioner for Patents,

P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: March 10, 2004

Dated: Mai

Corrio William

Respectably symmitted,

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